

PATENT  
B588-023 (25815.023)

Remarks/Arguments

Claims 1, 11, 21, 25, 28, 37, 39, 42, 51, 53, 57, 58 and 60 have been amended. Claims 2-6, 12-16, 22, 23, 29, 30, 38, 43, 44, 52, 54-56 and 59 have been canceled without prejudice.

Regarding applicants' previously submitted Information Disclosure Statement with attached form equivalent to PTO-1449, mailed June 30, 2005, the Examiner is again respectfully requested to mark one copy of the form (equivalent to PTO-1449) indicating that the Examiner has reviewed the listed documents and return the marked copy to applicants' undersigned attorney.

The Examiner has rejected applicants' claims 1-61 under 35 USC § 103(a) as being unpatentable based on the Black patent (US 6,307,956 B1) taken with the Yguerabide, et al. patent (US 6,586,193). With respect to applicants' claims, as amended, this rejection is respectfully traversed.

Applicants' independent claim 1 has been amended to recite as follows: A system for issuing an authentication certificate used in personal authentication, comprising: reaction means for reacting a DNA array in which a plurality of DNA probes corresponding to plural kinds of genes are arranged in a predetermined order, with a gene obtained from a given person; issuing means for issuing an authentication certificate for certifying the person; and controlling means for executing a process comprising the steps of: (i) making said reaction means react the DNA array with a gene obtained from the given person to form a hybridization pattern; and (ii) making said issuing means issue an authentication certificate by attaching the reacted DNA array obtained in the step (i) to a base of the authentication certificate. Independent claims 11, 21 and 60 have been similarly amended to recite issuing an authentication certificate on which a reacted DNA array is attached.

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Likewise, amended independent claims 25, 37, 39, 51, 57 and 58 now recite performing authentication processing using an authentication certificate on which a reacted DNA array is attached. Finally, amended independent claim 53 also recites that a reacted DNA array is attached on an authentication certificate.

Such constructions are not taught or suggested by the cited art of record. More particularly, the Black patent teaches that DNA can be used for personal authentication. The Yguerabide, et al. patent teaches reacting a DNA array with a gene obtained from a given person. However, neither patent teaches or suggests attaching a reacted DNA array on an authentication certificate.

Applicants' amended independent claims 1, 11, 21, 25, 37, 39, 51, 53, 57, 58 and 60, and their respective dependent claims, all of which recite such feature thus patentably distinguish over the Black and Yguerabide, et al. patents.

Applicants independent claim 61 recites an authentication method comprising the steps of: (i) reacting a DNA array with a gene obtained from a given person to form a first hybridization pattern, the DNA array being selected from plural kinds of DNA arrays each of which has a plurality of DNA probes corresponding to plural kinds of genes arranged in a predetermined order, wherein the order of the DNA probes in the plural kinds of DNA arrays are different from each other; (ii) registering information regarding the order of the DNA probes of the DNA array selected in the step (i); (iii) issuing an authentication certificate carrying a hybridization pattern formed on a reacted DNA array obtained by the step (i) to the given person; (iv) forming a second hybridization pattern, when a person holding the authentication certificate issued in the step (iii), needs to be identified as a true holder of the authentication certificate, the step (iv) comprising the sub-steps of: (iv-1) regenerating a new

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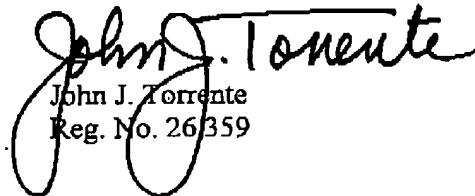
DNA array which is identical to the DNA array selected in the step (i) by using the information registered in the step (ii); and (iv-2) reacting the new DNA array with a gene obtained from the suspected person to form a second hybridization pattern; and (v) comparing the first hybridization pattern on the authentication certificate and the second hybridization pattern.

The cited Black and Yguerabide, et al. patents fail to teach or suggest at least registering information regarding the order of the DNA probes, and regenerating a new DNA by using the registered information. Applicants' claim 61 which recites such features thus patentably distinguishes over such patents.

In view of the above, it is submitted that applicants' claims, as amended, patentably distinguish over the cited art of record. Accordingly, reconsideration of the claims is respectfully requested.

Dated: July 21, 2006

Respectfully submitted,



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